

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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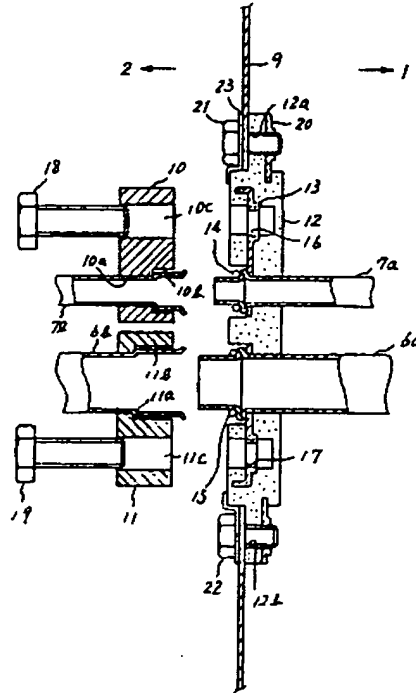
APPLICATION DATE : 16-05-88  
APPLICATION NUMBER : 63116835

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INVENTOR : ENDO YOSHIHIDE;

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TITLE : PIPING CONNECTION STRUCTURE  
FOR AUTOMOBILE



ABSTRACT : PURPOSE: To simultaneously perform liquid-tight connection of pipes and liquid-tight mounting to a vehicle body so as to improve wiring workability by connecting piping inside and outside the cabin of an automobile to each other through metal plates covered with resilient members, and connecting them to the body.

CONSTITUTION: Connectors 10, 11 are fitted to the respective ends of pipes 6b, 7b outside the cabin of automobile through which low and high pressure coolants flow. A first metal plate 13 is inserted into the center of grommet 12 made of resilient material, while pipes 6a, 7a inside the cabin through which pipes low and high pressure coolants flow are fitted to this metal plate 13. The pipes 6b, 7b outside the cabin are fitted through O rings 14, 15 to the pipes 6a, 7a. Connectors 10, 11 are connected through bolts 18, 19 to the threaded holes 16, 17 formed at the grommet 12 and the first metal plate 13. The grommet 12 is fixed to the body 9.

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